Original Article

Asfixia Event Based On LBW History And Early Children's Fertilizer

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ARTICLE INFO	ABSTRACT
	Background: Asphyxia neonatal is a newborn condition that fails to breathe spontaneously and regularly immediately after birth. This condition is at risk of infant death, one of the causes of infant death. This study aimed to determine the relationship between LBW history and premature rupture of membranes with the incidence of asphyxia. ***Methods:*** The research design is case-control. The study population was all infants. The sample is a portion of babies totaling 64 respondents, using accidental sampling. The independent variable is infant weight and premature rupture of membranes. The dependent variable is the occurrence of asphyxia—statistical tests using Chi-Square with a <0.05. ***Results:*** The results showed that respondents had average birth weights, as many as 48 respondents (75%), had negative Premature rupture of membranes as many as 46 respondents (71.9%), and did not have Asphyxia as many as 44 respondents (68.8%). Statistical test between birth weight variables with asphyxia (p = 0,000 with Pearson chi-square 31,621) and between variables premature rupture of membranes with asphyxia (0,000 with chi-square 31,418) which means that the relationship between premature rupture of membranes and asphyxia is stronger than the relationship between birth weight with Asphyxia ***Conclusion:*** The greater the risk of premature rupture of membranes, the greater the likelihood of asphyxia, and the lower the birth weight, the greater the risk of asphyxia..
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Introduction

Asphyxia neonatal is a newborn condition that fails to breathe spontaneously and regularly immediately after birth. This condition is at risk of infant death, becoming one of the causes of infant death (Bayih et al., 2021; Razak & Adisasmita, 2020; Syamsi & Zulala, 2021). If examined closely, this condition is related to a history of premature rupture of membranes in labor, in addition to other factors. The hope is that no babies born with asphyxia remember the risk of infant death. In fact, up to now, it is still often found occurrence of asphyxia in newborns, so the potential for complications (Alif, 2019; Fitriana et al., 2021).

According to the 2015 World Health Organization (WHO), 3% (3.6 million) of the 120 million newborns experience asphyxia every year. The WHO report states that around 3% (3.6 million) of the 120 million babies are born with asphyxia yearly, and nearly 1 million of these babies later die. IMR due to asphyxia in the Central Asian region, according to WHO, is the second highest at 142 per 1,000

after Africa. Asphyxia can be caused by premature rupture of membranes in the neonatal due to the prolapse of the funicular, which is the umbilical cord compressed between the baby's head and pelvis, causing compression that causes the threat of stopping ectoplasmic perfusion (Martin et al., 2017; Mota-Rojas et al., 2022). Neonatal asphyxia is caused by preterm labor, post-term delivery, umbilical cord twisting, respiratory disturbances, maternal factors, and many other factors. However, the dominant factor is preterm labor. Some of the causes of asphyxia are maternal factors, fetal factors, and umbilical cord factors (Syamsi & Zulala, 2021). In the umbilical cord factors including umbilical cord, short umbilical cord, umbilical cord, umbilical cord prolapse, pressure on the umbilical cord, and premature rupture of membranes (Butie et al., 2020; INFODATIN, 2020; Lau, 2017; Syamsi & Zulala, 2021; Yu et al., 2020). The impact of Asphyxia is to cause neonatal deaths between 8-35% in developed countries, while in developing countries, between 31-56.5%. Incidence of asphyxia in the first minute 47/1000 live births, and at 5 minutes, 15.7 / 1000 live births for all neonates (Mortimer & Berg, 2017; Razak & Adisasmita, 2020). The theoretical solution in dealing with Asphyxia is to conduct antenatal care checks that are routine, regular, and of quality, as counseling and management of asphyxia, so that the improvement of sedininya can be handled, in addition to practical solutions that include diagnosis correctly, prepare resuscitation equipment according to standards and conduct resuscitation according to procedures with health workers who are competent in providing newborn care (Bayih et al., 2021; Fitriana et al., 2021).

Methods

The research design is case-control. The study population was all infants. The sample is a portion of babies totaling 64 respondents, using accidental sampling. The independent variable is infant weight and premature rupture of membranes. The dependent variable is the occurrence of asphyxia. Instrumen used Quesionare. This research has Ethical Clearence. Statistical tests using Chi-Square with a <0.05

Results

Tabel 1. Statistik Test

Variable	df	Pearson Chi-Square	Chi-Square (P Value)	p
Birth weight with asphyxia	1	31.418	0,000	0,000
Premature rupture of membranes with asphyxia	1	31.621	0,000	

Statistical tests using the Chi-Square test with a <0.05 obtained p = 0.000 where H1 was received, which means that there is a relationship between the history of Birth weight and the history of Premature rupture of membranes with the incidence of asphyxia. The test results obtained the relationship between Birth weight with Asphyxia obtained a Pearson chi-square of 31.418, and the relationship between Premature rupture of membranes with asphyxia has a Pearson chi-square of 31,621, which means the relationship between Premature rupture of membranes with asphyxia is stronger than the relationship of Birth weight with Asphyxia.

Discussion

Statistical test between birth weight variables with asphyxia using Chi-Square test with a <0.05 obtained p = 0.000 where H1 was accepted and H0 was rejected, which means that there is a relationship between Birth weight history and the incidence of asphyxia in Update Hospital Palu. Statistical test between Premature rupture of membranes variables and

asphyxia using Chi-Square test with a <0.05 obtained p = 0,000 where H1 was accepted and H0 was rejected, which means that there is a relationship between the history of Premature rupture of membranes with the incidence of asphyxia. The results showed that most respondents had average birth weight with no asphyxia, as many as 42 respondents (65.6%). The results showed that most respondents had Premature damaging rupture of membranes with no asphyxia, as many as 41 respondents (64.1%). The results showed that most respondents had Negative Premature rupture of membranes, with an average body weight of 42 respondents (65.6%). The test results obtained the relationship between Birth weight with Asphyxia obtained a Pearson chi-square of 31.418, and the relationship between Premature rupture of membranes with asphyxia has a Pearson chi-square of 31,621, which means the relationship between Premature rupture of membranes with asphyxia is stronger than the relationship of Birth weight with Asphyxia.

Birth weight is one of the risk factors that are the leading cause of asphyxia neonatal (Bayih et al., 2021; Nur Hamida, 2019)(Haryoso, 2021; Ilmiati, 2021; Nur Hamida, 2019). There are several factors for the occurrence of asphyxia neonatal, one of which is the low birth weight (LBW) (Bayih et al., 2021; Yu et al., 2020). Babies with low birth weight (LBW) have many risks of experiencing problems in the body system due to unstable body conditions. Perinatal mortality in LBW infants is eight times greater than in normal infants. The prognosis of babies with LBW will be worse if the body weight gets lower (Marni, 2019). Death is often caused due to neonatal complications such as asphyxia, aspiration, pneumonia, intracranial hemorrhage, and hypoglycemia. Bivariate analysis results obtained Fisher's Exact results that have been corrected obtained a p-value of 0.033 (<0.05), which shows a relationship between babies' birth weight and the incidence of asphyxia neonatal. The logistic regression

test results showed an OR (Odd Ratio) of 53.737 means the risk of neonatal asphyxia in mothers giving birth to babies with Low Birth Weight (LBW), Very Low Birth Weight (LBWR), and Extra Low Birth Weight (LBW) of 53, 7 times greater than mothers who give birth to babies with average weight. The baby's weight has a direct effect on the quality of the baby. LBW is a baby weighing less than 2500 grams. Premature babies have rudimentary organs, so breathing problems and asphyxia neonatal are easy (Rani et al., 2012).

There is a relationship between LBW history and the incidence of asphyxia in newborns, and this is due to the occurrence of asphyxia caused by one LBW factor and multifactorial. This means that LBW babies can experience asphyxia, but even so they can not experience asphyxia (Anita Theodora Fitriani Mallisa, 2019; Mushalpah, 2021; Wardana et al., 2021). Birth weight results from the interaction of various factors through a process in the womb. Factors that can affect a baby's birth weight include maternal age, pregnancy distance, parity, hemoglobin levels, and nutritional status.

Conclusion

Based on the results of the case study obtained from the application of Spiritual Benson Relaxation to Mr. HR with anxiety nursing problems, it can be concluded: The assessment uses B1-B6, and Anxiety measurements use the SAS / SRAS Score. Priority nursing diagnoses that appear in Mr. HR, namely anxiety. Intervention is given to address anxiety nursing problems by observing, therapeutic, educational, and applying Spiritual Benson Relaxation. The implementation was carried out in Chronic Kidney Failure patients undergoing hemodialysis by applying Benson Relaxation, which was given for 15 minutes in one meeting. Meetings given to clients are two weeks, three meetings. Therapy Benson Relaxation anxiety assessment and observation

of the patient's general condition were carried out. For three meetings, spiritual therapy was carried out by Benson Relaxation on the client, and there was a significant decrease in anxiety, from a score of 78 down to 40.

Authors Contributions

The author carries out tasks from data collection, data analysis, making discussions to making manuscripts

Conflicts of Interest

All research teams agree with the final results of this study, and there is no conflict of interest in this study.

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